GOVERNMENT OF INDIA
NEW AND RENEWABLE ENERGY
LOK SABHA

UNSTARRED QUESTION NO:1957
ANSWERED ON:28.07.2016
Research and Development of Renewable Energy
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Will the Minister of NEW AND RENEWABLE ENERGY be pleased to state:

(a) whether the Government has taken any steps for research and development in the field of renewable energy in the country; and
(b) if so, the details there of along with the outcome of the R&D activities?

Answer

MINISTER OF STATE FOR POWER, COAL , NEW & RENEWABLE ENERGY & MINES (SHRI PIYUSH GOYAL)
(a): Yes, Madam. The Ministry of New and Renewable Energy (MNRE) has been supporting research and development (R&D) to various R&D/academic institutions, NGOs, industries, etc. in the field of solar, wind, biogas, biofuel, Hydrogen, Fuel Cells, geothermal, etc. for technology development and demonstration leading to commercialization. A comprehensive policy and guidelines for research, development and demonstration (RD&D) for new and renewable energy sector is in place. The MNRE has sanctioned a total of 71. R&D projects in solar, small wind and hybrid, biogas, biofuel, hydrogen, fuel cells and small hydro with total funds of Rs.186.78 crores during the last four years and the current year.

In order to review the progress of on-going projects and to identify thrust areas for RD&D, the MNRE organized a day long "Brainstorming Consultation Meeting on RD & D" on 5th January 2016, which was attended by key subject experts and concerned MNRE Group/Divisional Heads. In the meeting, "Thrust Areas with Action Plan for RD&D" for support by MNRE was prepared, which is uploaded at MNRE website for project preparation and implementation. It has strong emphasis on industry association and also collaboration for R&D projects for technology development.

(b): The focus areas for R&D are solar energy, wind hybrid systems, biogas, biofuels, hydrogen, fuel cells and related components. R&D projects undertaken have strengthened R&D/ academic institutes, industries for furthering RD&D for technology development for commercialization. In solar photovoltaics, the focus has been on indigenous development of solar cells with improved efficiency at par with international level, with cost reduction. Crystalline silicon solar cell of 18% efficiency has been developed at lab scale. R&D in solar thermal power provided feedback on operational aspects of the technology for further development. In wind, R&D in hybridization of solar and wind is being pursued for ensuring improved energy supply from renewable energy. In addition, R&D efforts are going on for design, development and demonstration of hydrogen and fuel cells for power generation and other uses.

The R&D efforts have led to design and development of solar water heating system, solar cookers, solar photovoltaic system, biogas plants, improved biomass cookstoves, gasifiers, biomass cogeneration, etc.
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